

# call for proposals no.2 (2018)

proposal selection process



# proposal selection process selection flowchart

PHASE 1

## Elimination

Executed by:  
Serrapilheira executive team  
and panel chairs

proposals outside the scope of the call

PHASE 2

## Qualification

Executed by:  
evaluation panels and  
Serrapilheira executive team

PHASE 3

## Selection

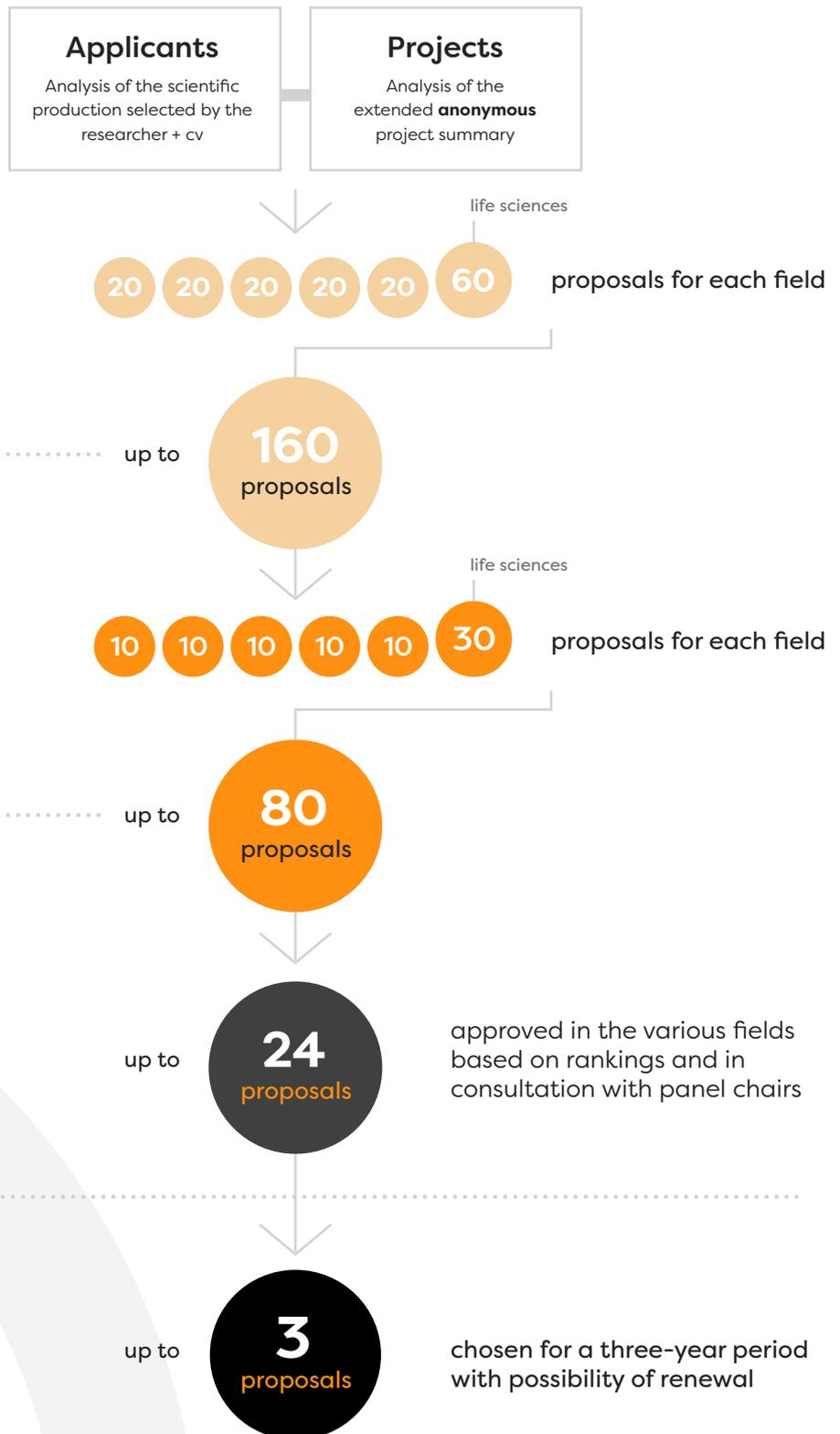
Executed by:  
evaluation panels

PHASE 4

## Final validation

Executed by:  
Serrapilheira President and Director  
in consultation with panel chairs

after one year





# proposal selection process a single proposal trajectory

PHASE 1

## Elimination

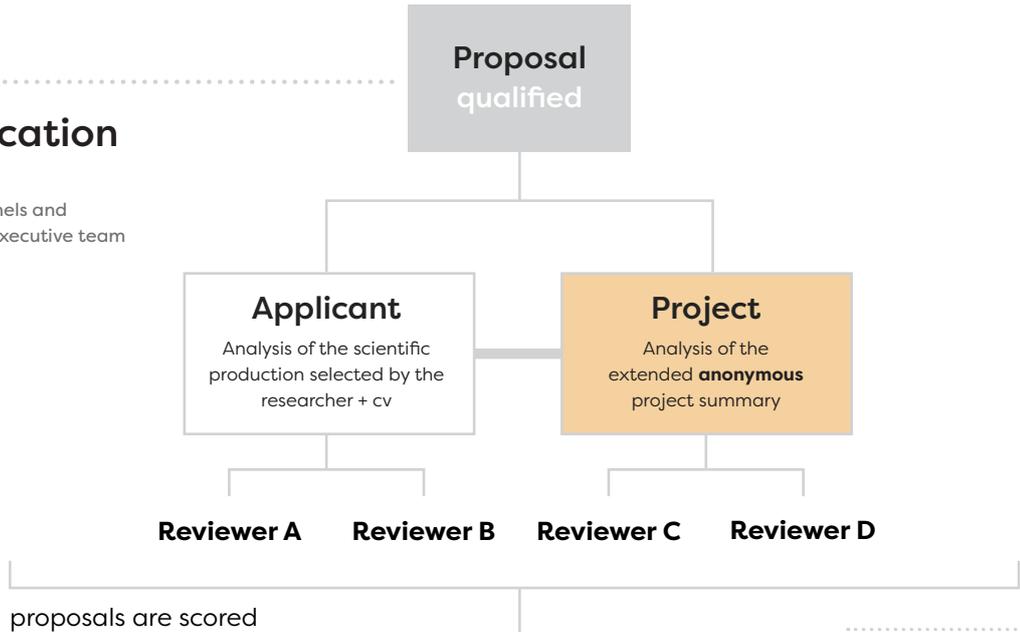
Executed by:  
Serrapilheira executive team  
and panel chairs



PHASE 2

## Qualification

Executed by:  
evaluation panels and  
Serrapilheira executive team



PHASE 3

## Selection

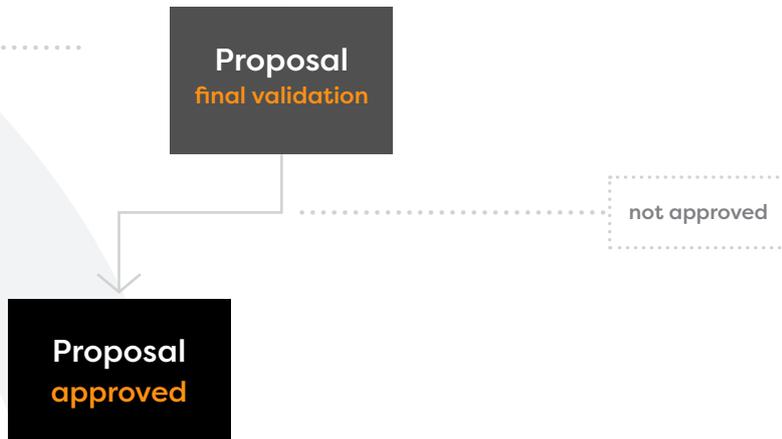
Executed by:  
evaluation panels



PHASE 4

## Final validation

Executed by:  
Serrapilheira President and Director  
in consultation with panel chairs





# call for proposals no.2 (2018)

## proposal selection process

### Criteria

#### Young scientists

1. with the potential to develop, or who have already developed, **outstanding research**
2. and are **posing big questions** in their fields

These young scientists should demonstrate that they are already developing first-rate, methodologically rigorous science. At the same time, they must pose a major question as the basis for a creative, daring, audacious project – one which can involve a degree of risk. Proposals that simply continue the applicant's research, or the research of their former adviser, if they do not propose relevant innovations, will be eliminated.

### Breakdown

#### 1. Elimination Phase

- Proposals that fall outside the scope of the call will be removed from consideration. This includes those that i) do not correspond to the list of fields we support (i.e. natural sciences, mathematics, and computer sciences) and ii) those that are exclusively focused on applied science, posing only utilitarian questions.
- Any candidate who has not been the lead author in conceiving and/or executing at least one published scientific paper, regardless of its impact, must also be eliminated. Lead authors are defined as those who made the greatest contribution to the article, not necessarily the lab leader or the leader of the research group.

Executed by: Serrapilheira executive team and panel chairs



## 2. Qualification Phase

- The remaining **applicants** and **projects** from the previous phase will be evaluated. In this phase, panel members will only examine two batches of documents: i) the scientific production indicated by the researcher and their CV (analyzing the candidate) ii) the extended anonymous project summary (analyzing the project).
- Each batch of documents will be evaluated in parallel by at least one panel member of the relevant field. The panel members tasked with the first batch will be different from the panel members who will work on the second.
- We should note that project evaluation in this stage will be **anonymous**.
- The panel members must score proposals from 0 to 10 in each of the categories below, 0 being the weakest and 10 the strongest.
- The executive team will calculate the average of all scores. In this phase, up to 20 projects from each field will move on to the selection phase. In principle, the selection will be determined by the highest scores awarded during the qualification phase. However, the panel can collectively select proposals that are judged competitive even if their scores are not within the top 20.

### Distribution of proposals for parallel evaluation

For example: math panel **member (A)** will evaluate candidates from proposals 1 to 20 and the extended anonymous project summary from proposals 21 to 40.

**Reviewer (B)** from the same panel will evaluate the candidates from proposals 21 to 40 and the extended anonymous project summary from proposals 1 to 20. The panel members will not have access to their colleagues' material.



## Criteria

- a. Applicants:** the quality and rigor of the research developed so far will be evaluated based on the **scientific publications selected by each researcher and their CV**. The panels will analyze applicants' descriptions of their most important publications and will also have access to those articles in full.
- i. **relevance:** how relevant is the science behind the articles?
  - ii. **originality:** how original is the science behind the articles?
  - iii. **scientific contribution:** has the applicant's academic work supported advances in his/her field?
  - iv. **methodological rigor:** how rigorous is the methodology used in the scientific production selected by the researcher?
  - v. **transparency:** how transparent is scientific production selected by the researcher in terms of methods and results?
  - vi. **structure and presentation:** how well-structured and well-written is the explanation presented by the researcher?
- b. Projects:** The originality of the project will be evaluated by the specialists on the evaluation panels, who will examine the **extended anonymous project summaries**.
- i. **impact:** how broad of an impact will this work have in its field, and how far will it go toward advancing science in general?
  - ii. **originality:** how original is the question, especially in terms of not simply continuing existing lines of research?
  - iii. **feasibility:** how feasible is the development of the proposed project?
  - iv. **structure and presentation:** how well-structured and well-written is the proposal?

Executed by: evaluation panel and Serrapilheira executive team



### 3. Selection Phase

- At this point, we'll choose the best proposals out of the up to 20 selected in each area. During this stage, the members of the panel will have access to the entirety of the submitted dossiers, including the complete project, and will conduct a **detailed analysis**. If there are no experts in the area among panel members, external reviewers can be consulted. The evaluation criteria for this selection process are listed below.
- At the end of the process, the evaluation panel sends a final list to the executive team with a list of up to **10 ranked selected proposals**, in a **collaborative decision**. Ties are allowed.
- Applications that make it through to the final stage of detailed analysis will receive the relevant panel's evaluations. **Only one review per panel for the finalists chosen**. This should be a summary review of the panel discussions. Reviews are not required for those proposals that are not recommended.

#### Criteria:

- a. does the project take on relevant challenges and/or tackle a **big question**? Is the project creative, daring, and audacious?
- b. **scientific approach**: is the proposed research methodology in line with the project objectives? Are the proposed deadlines and requested resources sensible and justified?
- c. **lead researcher**: does the researcher demonstrate the ability to conduct cutting-edge research? Is the researcher creative and able to develop independent ideas? Does the researcher publish high-quality, methodologically rigorous articles?
- d. **risk**: how technically difficult or risky is the proposed project?
- e. **grade**: from 0 to 10 (0 meaning that the project is not recommended, 10 being a strong recommendation), including justification.

Executed by: evaluation panels



## 4. Final Validation

Serrapilheira's president and director, based on the recommendations of the panels, will consolidate and approve the final list of up to 24 proposals approved across all areas.

It must be clear that proposals that are on the list may not be selected and, exceptionally, proposals that are not on the list may be selected. In the latter case the executive team will justify its choice to the panel chairs.

**Executed by: Serrapilheira President and Director in consultation with panel chairs**

## Final considerations

### The following will be used as a tiebreaker

Support will be allocated preferentially to scientists who lack independent resources to carry out their research. Preference will also be given to proposals submitted by underrepresented groups in terms of gender and ethnicity.

### About the number of panel members

The number of eligible proposals will determine the number of panel members who will work with Serrapilheira. We emphasize that each candidate/project will be evaluated by at least two panel members during the qualification stage.

### Sharing of evaluations

Applications that make it through to the final stage of the selection phase will receive one review elaborated by the corresponding panel.

### Warning for evaluators about implicit bias

In our methodology, we remind all panel members to become aware of unconscious biases and take this into account during the proposal evaluation process.